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| 09/909,417 | 07/19/2001 | Masahiro Yatake | U 013559-6 | 7288 |
| 140 | 7590 | 08/26/2004 | EXAMINER | |
| LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023 | | | SHOSHO, CALLIE E | |
| | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,417

Applicant(s)

YATAKE, MASAHIRO

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-9 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-9 and 11-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 5/24/04.

The following rejection is non-final in light of the new use of two new references against the present claims, namely, Nakano et al. (U.S. 6,676,736) and Yui et al. (U.S. 5,948,155).

Claim Objections

2. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 9, which depends on claim 4, recites that the compound of formula (1) is present in amount of 0.1 to 30%, while claim 4 recites that the compound of formula (1) is present in amount of 4 to 10%. Thus, claim 9 fails to further limit the subject matter of the claim on which it depends, i.e. claim 4, given that the amount of compound of formula (1) in claim is broader than that disclosed in claim 4.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 4-5, 7-9, 11-18, and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwata et al. (U.S. 4,986,850).

The rejection is adequately set forth in paragraph 3 of the office action mailed 1/21/04 and is incorporated here by reference.

With respect to newly added claim 23, it is noted that col.4, lines 36, 42, and 47-50 of Iwata et al. discloses the use of 5-50% glycerin.

5. Claims 4-5, 8-9, and 11-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano et al. (U.S. 6,676,736).

Nakano et al. disclose aqueous ink comprising solvent such as glycerol, colorant that is self-dispersing pigment, and 0.1-50% compound which is alkylene oxide adduct of glycerol, glucose, aldose or ketose wherein the compound comprises 1-100 CH₂CHYO repeating units. There is also disclosed method for ink jet printing wherein the above ink is ejected from ink jet printer onto substrate (col.1, lines 9-12, col.1, line 60-col.2, line 57, col.2, lines 64-66, col.3, lines 15-22 and 34-52, col.3, line 66-col.4, line 11, col.5, lines 16-21, col.11, lines 20-26, and col.15, lines 25-30). Attention is drawn to example 1 which discloses ink comprising 10% 2-pyrrolidone, 4% glycerol, 8% compound such as EO adduct of glycerol or EO/PO adduct of D-erythrose, 1% isopropanol, and 47% water. Although there is no disclosure of the surface

tension of the ink, given that Nakano et al. disclose ink identical to that presently claimed, it is clear that the ink would inherently possess surface tension as presently claimed.

In light of the above, it is clear that Nakano et al. anticipate the present claims.

6. Claims 4-9 and 11-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Yui et al. (U.S. 5,948,155).

Yui et al. disclose ink comprising water, colorant including self-dispersing pigment, 3-50% solvent such as glycerin, and 0.01-20% ethylene oxide/propylene oxide adduct of polyglycerin that comprises 0-200 repeating units of the formula CH_2CHRO , degree of polymerization of 2-30, and molecular weight of 166-250. There is also disclosed method for ink jet printing wherein the above ink is ejected from ink jet printer onto substrate (col.2, lines 30-54, col.3, lines 1-53, col.5, lines 15-28, and col.7, lines 6 and 40-42). Attention is drawn to example 2 which discloses ink comprising 55% pigment dispersion, 12% glycerin, 7% EO/PO adduct of polyglycerin, and water. Although there is no disclosure of the surface tension of the ink, given that Yui et al. disclose ink identical to that presently claimed, it is clear that the ink would inherently possess surface tension as presently claimed.

In light of the above, it is clear that Yui et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al. (U.S. 4,986,850) in view of *Introduction to Physical Polymer Science*.

The rejection is adequately set forth in paragraph 5 of the office action mailed 1/21/04 and is incorporated here by reference.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al. (U.S. 4,986,850) in view of Hayashi et al. (U.S. 6,500,248) or Johnson et al. (U.S. 6,478,863).

The rejection is adequately set forth in paragraph 6 of the office action mailed 1/21/04 and is incorporated here by reference.

Response to Arguments

10. Applicant's arguments regarding JP 62015274, Sano et al. (U.S. 5,503,664), JP 59059755, and Matrick et al. (U.S. 5,180,425) have been fully considered but they are moot in view of the discontinuation of the use of these references against the present claims.

11. Applicant's arguments and 1.132 declaration filed 5/24/04 have been fully considered but, with the exception of arguments relating to JP 62015274, Sano et al., JP 59059755, and Matrick et al., they are not persuasive.

Specifically, applicant has amended claim 4 to recite that the saccharide-alkyleneoxy derivative is present in amount of 4 to 10%. It is noted that Iwata et al. disclose the use of 0.05-4% saccharide-alkyleneoxy.

Applicant argues that although Iwata et al. disclose the use of 0.05-4% saccharide-alkyleneoxy, it is further disclosed that it is preferable to use such compound in amount of 0.05-2%. Applicant also notes that the examples of Iwata et al. utilize the compound in amount of 0.1% or 0.2%, which falls outside the scope of the present claims.

However, it is noted that “nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims.” *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). Further, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others.” *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). A fair reading of Iwata et al. as a whole discloses the use of 0.05-4% saccharide-alkyleneoxy which overlaps the amount presently claimed.

Applicant also argues that Iwata et al. is not a proper anticipatory reference against the present claims and points to MPEP 2131.03 to support this position. This portion of the MPEP states that “if the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with “sufficient specificity” to constitute an anticipation of the claims. In light of the above and in light of applicant’s filing of 1.132 declaration on 5/24/04, applicants argue that Iwata et al. is not sufficiently specific.

However, the present claims are not drawn to a “narrow range” as set forth above. That is, the presently claimed amount of saccharide-alkyleneoxy is broad as compared to the amount disclosed by Iwata et al. It is the examiner’s position, therefore, that Iwata et al. do disclose the

claimed invention with sufficient specificity. According to MPEP 2131.03, the "test" for lack of sufficient specificity arises when the claimed range is narrow with respect to the broad reference range. That, however, is not the case here given that the claimed amount of saccharide-alkyleneoxy is broader than amount disclosed by Iwata et al.

Applicants also argue that Iwata et al. is not a proper anticipatory reference against the present claims given that glycerin is but one of a huge number of solvents disclosed in Iwata et al. and that there would be no motivation for one of ordinary skill in the art to pick and choose glycerin from amongst the many other disclosed solvents.

However, although Iwata et al. disclose the use of other types of solvents, applicant's attention is drawn to MPEP 2131.02 (A) which states that "...when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named". *Ex Parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990).

Applicant has submitted 1.132 declaration which compares ink within the scope of the present claims, i.e. comprising 4-10% compound of presently claimed formula (1) in combination with maltitol, xylitol, or glycerol, with ink outside the scope of the present claims, i.e. comprising compound of presently claimed formula (1) in amount of 0.5, 1, 2, or 3% or comprising compound of presently claimed formula (1) alone. It is shown that the inks of the present invention are superior in terms of nozzle clogging recovery property.

However, as cited in MPEP 706.02(b), a rejection based on 35 USC 102(b), can only be overcome by (a) persuasively arguing that the claims are patentably distinguishable from the prior art, (b) amending the claims to patentably distinguish over the prior art, or (c) perfecting

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priority under 35 USC 119(e) or 120. As can be seen, comparative data is not sufficient to overcome an anticipatory rejection under 102(b).

In light of the above, it is the examiner's position that Iwata et al. remains relevant reference anticipatory reference against the present claims.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
8/20/04